

SCIENTIFIC.

The utility of wire rope transmission has become widely recognized. Not only among the rugged hills and mountains of the East and West where streams go rushing down through caverns and rocky steepes, where no locations for mills or factories are afforded, this means of transmission of precious power appreciated, but it is so convenient to use that we find on the prairies of the West mills being operated at a long distance from water powers by the wire rope. A few days ago, on a trip through Nebraska, we met a rope stretching for nearly a mile from a water power to a mill that had recently been built adjoining a railroad, the owners finding it much more to their advantage to have it there, with the switching privileges afforded, than at the dam. The expense of hauling the flour which is thus saved to them will very soon pay for the system of power transmission.

Dr. Henry J. Buck, writing to the Lancet, says: "I have used this drug for more than twenty years—I may say almost daily—and many of my patients will not travel without a bottle of the 'magic lotion.' As they call it, the simplest and most efficacious way of applying it is to soak a large handful of the crushed pods in half a pint of hot water for an hour, then strain, and bottle for use. A teaspoonful of eau-de-cologne added will help to keep the solution, or it can be well boiled after preparing. I then have it applied to the affected parts on a piece of linen folded three or four times, or on a lint, and covered with gutta percha tissue or dry flannel. In this way the lotion may be kept on for hours without vesicating, and in many cases the skin is hardly reddened. The stinging and burning sensation produced by the capsium lotion is, after a few minutes, welcomed by the sufferer, so magically does it often remove the rheumatic or neuralgic pain for which it is being applied. In acute toricollis a cure is often speedily obtained by covering the side affected with the application. In any form of neuralgia, rheumatism, subacute gout, pleurodynia, and such like, it will be found most useful, and may be reapplied over and over again during the day and night without any fear of vesication."

M. N. Farren finds that when the metal magnesium is heated in a current of ammonia thoroughly dry, and keeping the temperature below a red heat, it combines with the gas without changing much in appearance, though its chemical properties are much modified; for instance, it will not melt below a bright red heat, and burns, when red hot, with violent decolorations or small explosions. If the current of ammonia is continued, and the metal in this form heated to bright redness, it is gradually converted into an orange yellow substance which is permanent. This new product dissolves in acids, and the solution contains ammonia. When fragments of magnesium which have been kept at a dull red heat for some time come in contact with gaseous ammonia, it often happens that their surface becomes dark yellow and shines like gold. The exact nature of this golden magnesium has not yet been made out.

A rafting pin appears to be a very simple thing and of trifling importance, but it is not so inconsequential after all, when the number used annually is taken into consideration, and the amount of hardwood timber consumed in their production is understood. The Tillamook and other boom companies in Michigan use millions of these little and simple devices, one pin being required to every log "tied out" by them; and the firms producing them use up whole "train loads" of logs in their manufacture. They are simply a wedge-shaped piece of wood with sufficient of the center of the wedge removed to admit the insertion of a small sized rope, so that when they are driven into the center of each log they cover the rope and hold it firm. When the logs thus fastened in strings reach their destination, a slight blow breaks the pin, loosens the rope, and permits the logs to be handled separately. It will thus be perceived that millions of these little devices are made and destroyed annually.

A writer in a London journal calls attention to the unappreciated uses and preservative qualities of soap-stone, a material, he says, which possesses what may be regarded as extraordinary qualities in withstanding atmospheric influences, those, especially, which have so much to do with the corrosion of iron and steel; and from experiments made, it is said that no other material is capable of taking hold of the fiber of iron and steel so readily and firmly as this. In China, soapstone is largely used in preserving structures built of sandstone and other stones liable to crumble from the effect of the atmosphere; and the covering with powdered soapstone in the form of paint, on some of the obelisks in that country, composed of stone liable to atmospheric deterioration, has been the means of preserving them intact for hundreds of years.

It is said that the soil around an old tree, especially a dead one, is unfavorable to the growth of a young one—probably because the soil is exhausted of some important food element, which may have caused the death of the old tree. If a young tree is set in the place of an old one it is best to remove a large portion of the old soil and replace it with new if you want the young tree to thrive.

As a rule, it is true economy to produce and manufacture everything as near as possible to the place of its consumption. The man who grows on the farm all he consumes on it saves double transportation—the hauling home what he buys and the hauling to market what he sells to pay for it. These two items of cost may make all the difference between successful and unsuccessful farming.

Wherever weeds grow luxuriantly the ground is usually fertile, and such ground should be made to produce some kind of a crop. At this season millet or Hungarian grass should be sown on such land.

Experiments with the Bordeaux mixture, as a remedy for grape rot, is being made in every section this season, and it is believed that in a few years the disease will be under control.

For family use it is advisable to plant six or eight peach trees every year, which will take the place of those that are ceasing to bear from age.

FARM NOTES.

THE PROPER CARE OF A COLT.—We will start with the suckling at the day of its birth, and presume that it is of good parentage, both sire and dam, that it is sound and able to stand and walk within fifteen minutes after it breathes. At the age of a week most farmers come to work the dam and let the suckling follow around as best he can, and at the age of four months, the colt being then of sufficient age to wean, the dam has performed a good summer's work, worked just as hard as her gelding mate with no colt. This method is entirely wrong. The heated blood, tiresome labor of both mare and colt is really killing both.

The mare and colt during the first four, five or six months should be kept in good pasture where there is plenty of good water and shade. While it may be practicable to wean the colt at four months, we certainly prefer six, and now comes the most important period of the entire five years of the colt's growth, and if started or stunted the first winter it never fully recovers. Not only the size, but the whole frame of the animal is injured, never to be regained.

The colt should be fed on plenty of good, clean hay, plenty of water at all times, and we would give half and half of ground oats and wheat bran twice a day, about two quarts at a mess. We give this dry, but if scalded and then cooled it will be better. A well-to-do farmer told me once this would be too much; I think he was right for the first week or two, but certainly not for the cold winter days, nor the spring either. I asked him what damage it would do; his answer was too rapid a growth. He had previously told me that he would treat a colt as he would a boy. I asked him if he ever knew too big a growth of boy, but to this there was no answer. The colt should have a warm place to protect himself from cold weather and storms, a bed of dry straw or dust to sleep upon, or to lie down at pleasure; he must not be confined to the stable, but have a yard; or, better still, an open field to run in; in no case should he be allowed to stand on a hard floor.

SMUT IN WHEAT.—Smut in wheat was once a great cause of loss and complaint, and it was found that the smut increased when smutty seed was used. I found by making a strong brine with blue vitriol dissolved in it, putting it in a tub large enough to hold a tight basket in which the seed wheat was placed—the wheat stirred and skimmed, and then raised out of the brine and allowed to drain, when it was poured out or put in bags and so remained twelve to twenty-four hours, and then sown in the usual manner. I never found this to fail as a remedy in wheat. The strong brine was useful to float out light and probably diseased grains, and also to perfectly introduce the vitriol to all the grains of wheat. Two years ago, thinking of this, I poured my corn on the floor and poured among it a solution of blue vitriol and gave it a good stirring. But it will be seen that that way of applying the vitriol did not surely reach every grain. The result was much less smut than in former years.

THE "GENERAL PURPOSE COW."—This long-mooted question is still receiving attention. One writer—who evidently favors the Holsteins—says it is a well known fact that if you want to breed trotters you must employ sires and dams with trotting pedigrees. If you want good cows for milk, you must breed from animals having a good milk pedigree, and the same is true in regard to butter and beef. Now, if we can breed a good butter cow, a good milk cow, and a cow that will make good beef, why can we not, by combining these elements, get a cow that would be a general purpose cow? The Holstein combines beef, butter and milk more strongly than can be found in any other breed of cattle now extant.

The following is given as an excellent mixture of seed per acre for a meadow: 12 pounds of timothy, 5 pounds of Italian rye grass, 5 pounds of meadow fescue or tall fescue, 4 pounds of red top, 3 pounds of rough-stalked meadow grass, 6 pounds of medium clover. If the meadow is moist, bromus or alsike may be introduced, the red top increased and the fescue and the clover lessened.

In the catalogue of the American Pomological Society votes from the different States were given as follows for various popular apples: Forty votes for Red Astrachan, 38 for Early Harvest, 33 for Maiden's Blush, 30 for Oldenburg, 27 for Northern Spy, Fomeuse, Ben Davis and Caroline Jane, 29 for Gravenstein, 20 for Fall Pippin, and 21 for Baldwin, Jonathan and Roxbury Russet.

It is said that the soil around an old tree, especially a dead one, is unfavorable to the growth of a young one—probably because the soil is exhausted of some important food element, which may have caused the death of the old tree. If a young tree is set in the place of an old one it is best to remove a large portion of the old soil and replace it with new if you want the young tree to thrive.

As a rule, it is true economy to produce and manufacture everything as near as possible to the place of its consumption. The man who grows on the farm all he consumes on it saves double transportation—the hauling home what he buys and the hauling to market what he sells to pay for it. These two items of cost may make all the difference between successful and unsuccessful farming.

Wherever weeds grow luxuriantly the ground is usually fertile, and such ground should be made to produce some kind of a crop. At this season millet or Hungarian grass should be sown on such land.

Experiments with the Bordeaux mixture, as a remedy for grape rot, is being made in every section this season, and it is believed that in a few years the disease will be under control.

For family use it is advisable to plant six or eight peach trees every year, which will take the place of those that are ceasing to bear from age.



SYRUP OF FIGS
ONE ENJOYS
Both the method and results when Syrup of Figs is taken; it is pleasant and refreshing to the taste, and acts gently yet promptly on the Kidneys, Liver and Bowels, cleanses the system effectually, dispels colds, headaches and fevers and cures habitual constipation. Syrup of Figs is the only remedy of its kind ever produced, pleasing to the taste and acceptable to the stomach, prompt in its action and truly beneficial in its effects, prepared only from the most healthy and agreeable substances, its many excellent qualities commend it to all and have made it the most popular remedy known.

Syrup of Figs is for sale in 50c and \$1 bottles by all leading druggists. Any reliable druggist who may not have it on hand will procure it promptly for any one who wishes to try it. Do not accept any substitute.
CALIFORNIA FIG SYRUP CO.
SAN FRANCISCO, CAL. NEW YORK, N. S.

HOUSEHOLD.

MACARONI.—Break the macaroni in pieces an inch long. Boil one-half hour and drain; add one pint of cream, one well-beaten egg, season with butter, salt and a little pepper. Stir over a clear fire until it thickens, and serve hot.

DRIED APPLE DUMPLINGS.—One pint of dried apples, cut, one-half pint of sweet milk, two teaspoonfuls of baking powder and one tablespoonful of butter or lard. Use flour sufficient to make into small biscuits, and drop into boiling water and boil quickly till the apples are done. Cut the apples into small bits with scissors, and soak into warm water before making. Eat with cream sauce flavored with nutmeg.

CHICKEN PIE.—Singe and parboil a pair of chickens, cut them up and cook till quite tender. Uncover when nearly done and let the water boil away till reduced one-half. Line a large, deep pan with biscuit dough made very short and rolled about an inch thick, and put in the chicken cut into finer pieces, with butter, salt, pepper, a dredging of flour, and their own gravy. Cover and bake till the upper crust is brown. Serve with mashed potato and cranberry sauce.

A ROAST HAM.—Take a nice little ham which has been pickled but not smoked. Parboil in water to cover for an hour, throwing in a bay leaf and a few corncobs of black pepper and allspice. Transfer to the oven, bake for two hours, basting freely with a little of the liquor from the pot, or with a little sugar dissolved in vinegar or sherry wine. Strewn with bread crumbs at the beginning of the last half hour, and brown nicely.

BROILED SHAVINGS.—Shave from a fine, lean ham, as you would cut dried beef, the required amount of very thin slices. Put these on a gridiron over a clear fire, and broil rather crispy until the edges curl. Serve heaped in the centre of a platter with a wall of mashed potatoes around them. Or sift your potatoes through a colander upon the platter, and sprinkle the shavings, lightly buttered, over the top.

APPLE FRITTERS.—Pare two large apples, cut them in slices half an inch thick; core them with a round cutter; put them in a dish and pour brandy over them, let them lie for two hours; make a thick batter, using two eggs; have clean lard, and make it quite hot; fry two at a time, a nice light brown; put them on the back of a sieve on paper, sift powdered sugar over them, glaze them with a shovel or salamander; dish on a napkin.

DRIED LIMA BEAN SOUP.—Soak one quart lima beans over night; the following day boil them until tender; drain and press them through a colander; put them over the fire with a pint of veal stock; put a pint of milk on the fire, and when it boils thicken it with two tablespoonfuls of flour rubbed into one of butter; stir until it thickens and then add it to the stock, and season with salt and pepper; let it boil up once; add the beaten yolks of two eggs and serve.

BROILED SALT MACKEREL.—Select a small mackerel (which will be more tender than a large, older one) and put in to soak over night in plenty of cold water; pour off the water and let it stand in milk two hours; then drain and dry in a napkin, brush butter, or, better still, pure olive oil over it, and boil in a double-veiled broiler; when done plunge it into hot water a moment, which swells it and makes it look fat; serve with melted butter containing lemon juice and chopped parsley.

Please Don't Forget It.
That Dr. H. J. Kane's "Cannal India" is prepared in Calcutta, India, from the purest and best Native Hemp, and is the only remedy either in that country or this that will positively and permanently cure Consumption, Bronchitis, Asthma, Neuralgia and Nervous Debility or break up a fresh cold in twenty-four hours. \$2.00 a bottle, three bottles for \$5.00. Sold by Druggists, 1022 Race Street, Philadelphia.

A wise farmer learns from his mistakes as well as from his successes.
One Thousand Dollars.
I will forfeit the above amount, if I fail to prove that Fioraplexion is the best medicine in existence for Dyspepsia, Indigestion or Biliousness. It is a reliable cure, and affords immediate relief in cases of Kidney and Liver Complaint, Nervous Debility and Consumption, Chlorosis, and all the ailments of the system and cures where other remedies fail. Ask your druggist for it and get well. Valuable book "Hints for Nursing" also, sample bottle sent free; all charges prepaid. Address Franklin Hart, 58 Warren Street, New York.

Put dishes, tumblers and other glass articles into a kettle, cover them entirely with cold water and put the kettle where it will soon boil. When it has boiled a few minutes set it aside covered close. When the water is cold take out the glass. This process will harden the articles so that they will not be so easily broken.

Boils and Pimples and other affections arising from impure blood may appear at this season, when the blood is heated. Hood's Sarsaparilla removes the cause of these troubles by purifying, vitalizing, and enriching the blood, and at the same time it gives strength to the whole system.

Canal's Kidney Cure for Dropsy, Gravel, Diabetes, Bright's, Heart, Urinary or Liver Diseases, Nervousness, &c. Cure guaranteed. 831 Arch Street, Philad'a. \$1 a bottle, 6 for \$5, or druggist. 1000 certificates of cures. Try it.

An apparatus has been invented which is intended for prevention of collision in time of fog.

It is easy to run in old ruts, but it costs too much.

Six Novels Free, sent by Cragin & Co., Philadelphia, to any one in U. S. or Canada, post paid, upon receipt of 25 Doubtless's Kissed Bone Wrappers. See list of novels on circulars around each bar. This soap for sale by all grocers.

Guinea fowls consume grubs and insects.

Potato bugs are at work in Rhode Island.

VEGETABLE SOUP.—Wash thoroughly a lettuce, with two or three handfuls of sorrel, cabbage or spinach, then shred into small pieces, and put over the fire, with two ounces of butter, for at least ten minutes, turning over the vegetables with a fork the while. To this add one quart of hot stock, and simmer for one hour, only letting it boil up at the last. Then add four yolks of eggs, and return to the fire, taking care the soup does not boil after the eggs have been added. Stir in a gill of good cream, a piece of butter rolled in flour, and serve in a hot tureen, with a dash of cayenne pepper and salt to taste.

COD ROES IN SANDWICHES.—Cut thin slices of bread and butter from a square loaf; spread the slices with an anchovy paste. Pound some cod roes lightly in a mortar, and make into sandwiches between the savory bread and butter. Cut into triangles. A teaspoonful of mayonnaise sauce on each sandwich is a great improvement, but they are very palatable without.

6 per Cent. Guarantee Bond. Attention is called to this

Protective Investment. Issued by the

PENN MUTUAL
Life Insurance Co.,
OF PHILADELPHIA.

It guarantees to the holder, in the event of death occurring within the twenty-five years, an annual interest of

SIX PER CENT. SIX PER CENT.

upon the Bond—a sum greater for most ages than all the installments paid.

E. M. NEEDLES, Pres't.
HENRY C. BROWN, Sec'y.

Agents wanted in all the Western States, on liberal terms.

WM. FITCH & CO.,
103 Corcoran Building, Washington, D. C.
PENSION ATTORNEYS

KIDDER'S PASTILLES
Give relief from BRONCHITIS, ASTHMA, Croup, Hoarseness, &c. Sold by Druggists, Philadelphia, Pa.

Even the little pig in the picture is a more agreeable companion than a man with a dirty collar or a woman who presides over a tawdry house. But nobody wants the reputation of being a pig under any circumstances.

EVERY WATERPROOF COLLAR OR CUFF
THAT CAN BE RELIED ON
Not to Split!
Not to Discolor!
BEARS THIS MARK.

TRADE MARK
WASHING MACHINE
NEEDS NO LAUNDERING. CAN BE WIPED CLEAN IN A MOMENT.
THE ONLY LINEN-LINED WATERPROOF COLLAR IN THE MARKET.

Good As Gold
So enthusiastic are thousands of people over the benefits derived from Hood's Sarsaparilla, that they can hardly find words to express their confidence in and gratitude for this medicine. "Worth its weight in gold" is a favorite expression of these warm friends.

LEND YOUR EAR
TO WHAT WE HAVE TO SAY.

MORWITZ'S
BEST LOW-PRICED
German and English
Dictionary,
PUBLISHED AT THE REMARKABLY
LOW PRICE OF
Only \$1.00, Postpaid, 650 Pages,
Or only \$1.50, Postpaid, 1224 Pages.

This Book contains 600 Finely Printed Pages of Clear Type on Excellent Paper, and is Handsomely yet Serviceably Bound in Cloth. It gives English words with the German equivalents and pronunciation, and German words with English definitions. If you know a German word and desire to know its meaning in English, you look in one part of the Book while if the English word is known, and you want to translate it into German, you look into another part of the Book.

It is invaluable to Germans who are not thoroughly familiar with English, or to Americans who wish to learn German. Consider how easily you can master German with the aid of this Dictionary if a half hour per day is devoted to study, how much knowledge can be derived from the knowledge, and hasten to send for this first-class book. You will never regret it.

Can be had at any Bookstore, at the office of this paper, or by applying to

MORWITZ & CO.,
614 Chestnut Street,
PHILADELPHIA.

FRAZER AXLE GREASE
BEST IN THE WORLD.
Its wearing qualities are unsurpassed, actually outlasting 10 boxes of any other brand. Not affected by heat. GET THE GENUINE.

DEPENDENT PENSION BILL
has become a law. \$12 PER MONTH to all honorably discharged soldiers and sailors of the late war, who are incapacitated from earning a support. Widows the same, without regard to cause of death. Dependents Parents and Minor Children also included. Over 20 years' experience. References in all parts of the country. No charge if unnecessary. Write at once for "Copy of Law," blanks and full instructions all free to H. McALLEN & CO., Successors to Wm. Conrad & Co., P. O. Box 715, Washington, D. C.

WANTED A CANYASER for this town and vicinity. Something sure. Write for particulars to MRS. S. D. ARMBRUSTER, Philadelphia, Woman's Exchange, 19 S. 12th Street.

PENSION JOHN W. HOBBS, Esq., Successor to H. W. Hobbs, Esq., Late Principal Examiner U. S. Pension Bureau, 7 yrs in last war, lit adjudicating claims, city since.

SADDLE
It is a solid cake of scouring soap. Try it in your next house-cleaning.

A clean thing's kindly
It is plain that a charm is added to things cleaned by SADDLE.

Even the little pig in the picture is a more agreeable companion than a man with a dirty collar or a woman who presides over a tawdry house. But nobody wants the reputation of being a pig under any circumstances.

TRADE MARK
WASHING MACHINE
NEEDS NO LAUNDERING. CAN BE WIPED CLEAN IN A MOMENT.
THE ONLY LINEN-LINED WATERPROOF COLLAR IN THE MARKET.